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REMARKS

Each objection and rejection is addressed below under the original subject and numeric heading set forth in the Office Action.

Drawings and Specification

1. The specification was objected to for having figures in the body of the specification. In order to overcome the objection, graphs on page 25, 26, and 27 of the specification were deleted and new drawings that include said graphs are now attached as new sheets to this response. The specification 5 on page is amended to include reference to the brief description of drawing. Support for the amendment is provided on page 24, lines 3-7 of the specification.

2. The drawings were objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. In order to overcome the objection, a new figure that shows all the features of the invention is now provided. The specification has been suitably amended by providing reference numerals to the features shown in Figure 1.

3. The abstract of the disclosure was objected to as the abstract exceeds 150 words. Corrected abstract is provided on a separate sheet attached to this response.

Claim Objections

4. Claim 17 is objected to. Examiner had interpreted claim 17 as depending from claim 16. Correction to claim 17 has been made in the amendment and included in the Listing of Claims section of this response.

Claim Rejections – 35 USC §101

6. The Office Action stated that claims 1, 6-9, 20, 24, and 25 were rejected under 35 U.S.C. § 101 as the claimed invention is directed to non-statutory subject matter. In order to overcome the foregoing rejection, claims 1 and 20 were amended to recite the limitation recited in claim 2. Since, claims 1 and 20, as amended, now produce a tangible result, it is respectfully submitted the amended claims should no longer be considered a non-statutory subject matter. In view of the foregoing, amendment, it is respectfully submitted said claims 6, 7, 24, and 25 depending from the amended claims 1 and 20, respectively have also now overcome said rejection.

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Claim Rejections – 35 USC §102

8. The rejection of claims 1-7, and 10-14 under 35 U.S.C. § 102(b) as being anticipated by US 4,403,866 to Falcoff et al. (hereafter Falcoff) and remarks associated therewith are respectfully traversed in view of the following remarks:

At the outset, it should be noted that Falcoff discloses a conventional process that results in **repeatedly producing test paint samples** and measuring the color values of the test paint samples and repeatedly correcting the formulation to achieve a close matched color, see Example 1, Col. 6, of Falcoff. Unlike what is taught in Falcoff, the instant claims **do not recite producing test paint samples**. Falcoff did not disclose or teach that regulatory criteria for a specified end use are to be considered. The instant invention requires such a consideration in step (v) of claim 1 and means (d) in claim 11. Falcoff did not disclose or teach that an acceptability equation for a specified end use is to be considered during the selection of an optimal viable combination from viable combinations. The instant invention requires such a consideration in step (vi) of claim 1 and means (e) in claim 11. In view of the forgoing remarks, it is respectfully submitted that claims 1-7, and 10-14 are not anticipated by Falcoff.

It is also alleged on page 4 in the Office Action that Falcoff teaches a color matching method and system that discloses the following: measuring reflectances of a target portion of a target coating at a set of preset wavelengths with a spectrophotometer of a coating characterizing device to plot a target spectral curve of said **target portion** (col. 3, lines 5-30 with tristimulus values demonstrating reflectances measured; col. 4, lines 50-65); calculating target color values of said **target portion from said target spectral curve of said target portion** (col. 3, lines 5-30; col. 4, lines 50-67). The aforestated interpretation of Falcoff is respectfully questioned, since Falcoff, as seen in the apparatus of Falcoff in Figure 1 teaches measuring the color values of a **wet paint** in a cell 18 via a colorimeter 19 and not the color values of a target portion of a target coating, which is not a wet paint but a coating on a substrate, such as an automotive body.

The Office Action also alleged that Falcoff teaches "selecting one or more preliminary colorant combinations from a stored list of known colorants in accordance with a combinatorial selection criteria to match with said target color values". The aforestated interpretation of Falcoff is respectfully questioned, since Falcoff as seen in

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Figure 1 and at column 3, lines 49-54 teach dispensing binder solution 7, mill base 8 and tint solutions 10 in accordance with a formula of a paint to be made (column 1, line 63 and see also "FORMULA INPUT" to computer 1 in Figure 1). There is no disclosure, teaching or suggestion in Falcoff of selecting one or more preliminary colorant combinations from a stored list of known colorants, such as those described on page 17, lines 15-17 and page 18, lines 1-6 of the current specification, in accordance with combinatorial selection criteria, such as those described on page 22, lines 3-13 and page 23, lines 1-25 of the current specification. The Office Action also alleged that Falcoff teaches determining concentration of each said known colorant in each of said preliminary colorant combinations in accordance with color matching criteria wherein said concentration of each said known colorant is optimized for optimal match of color values of each of said preliminary colorant combinations. The aforesaid interpretation of Falcoff is respectfully questioned, since the applicants have been unable to find anywhere in Falcoff any disclosure of such a step. The Office Action also alleged that Falcoff teaches balancing said preliminary colorant combinations to allow for the presence of non-colorant components in said matched coating composition to generate one or more viable combinations optimized in accordance with mixing and regulatory criteria developed for said specified end-use and selecting an optimal viable combination from said viable combinations in accordance with an acceptability equation for said specified end-use, said optimal viable combination having an optimal acceptability value for said specified end-use wherein said known colorants and non-colorant components when mixed in accordance with said optimal viable combination produce said matched coating composition that when applied as a matched coating visually matches the appearance of said target coating. The aforesaid interpretation of Falcoff is respectfully questioned, since the applicants have been unable to find anywhere in Falcoff any disclosure of such a step. Thus, it is not seen why Falcoff anticipates the aforesaid claims.

It is alleged in the Office action that as for the now canceled claim 2 and claim 12, Falcoff discloses everything as recited in claims 1 and 11 and in addition Falcoff discloses displaying on a screen of a monitor said optimal viable combination (Fig. 1: 1; evidenced by display of information at col. 6, lines 20-36 and 45-50). The aforementioned remark and rejection associated therewith are respectfully traversed, since at the aforesaid tables in Falcoff at column 6, lines 16-18 only L^* , a^* and b^*

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values were supplied to the computer. There is no mention of any such values being "displayed" on a monitor. The same holds true for the table at lines 45 to 50 at column 6 of Falcoff. Moreover, there is no support anywhere in Falcoff of any displaying of the optimal viable combination, such as that presently claimed. Moreover, one of ordinary skill in the art would not be led to the interpretation of Falcoff alleged in the Office Action since, as seen in Figure 1, once the formula is "inputted" in computer 1, it is colorimeter 19 that monitors paint being made via cell 18 to adjust dispensing of components to mixing vessel 13 in accordance with a formula "inputted" to computer 1. There appears no need to "display" any formula since it has already been inputted. Thus, it is not seen why now-canceled claim 2 and claim 12 are anticipated by Falcoff.

It is alleged in the Office action that as for claims 3 and 13, Falcoff discloses everything as recited in claims 1 and 11 and in addition Falcoff discloses in Figure 1 and column 5, lines 1-27 mixing of components of the optimal viable combination, such as that currently recited. The aforementioned remark and rejection associated therewith are respectfully traversed since a user only "inputs" a formula into computer 1 in Figure 1. There is no disclosure or teaching in Falcoff of how such a formula is to be generated from color values of a target substrate, such as the undamaged portion of an automotive body. Thus, it is not seen why claims 3 and 13 are anticipated by Falcoff.

It is alleged in the Office action that as for claim 4, Falcoff discloses everything as recited in claim 1 and in addition Falcoff discloses at column 8, lines 20-30 applying said matched coating composition over a substrate to produce said coating that visually matches the appearance of said target coating. The aforementioned remark and rejection are respectfully traversed since Falcoff at column 7, lines 63-68 and column 8, lines 20-30 discloses making a paint that matches the color values of a standard liquid paint (see also claim 1 of Falcoff). There is no disclosure or teaching in Falcoff of how a matched coating that visually matches the appearance of said target coating, such as an undamaged portion of an automotive body, is to be made. Thus, it is not seen why claim 4 is anticipated by Falcoff.

It is alleged in the Office action that as for claim 7, Falcoff discloses everything as recited in claim 1 and in addition Falcoff discloses a plurality of colorants (Fig. 1: 10-12) and that there may be 5 paint formulas (col. 5, lines 65-67). The aforementioned remark and rejection are respectfully traversed since Falcoff in Figure 1 discloses a conventional way of making a paint from various tints, such as 10-12, which are

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dispensed in accordance with a formula inputted in computer 1. Moreover, Falcoff at column 5, lines 65-67 and column 6, 1-3 discloses that computer 1 can inputted with multiplicity of paint to make multiple paints wherein the device automatically washes mixing vessels before a paint from the next paint formula can be made. The presently claimed invention generates an optimal viable combination from which a paint can be produced whose appearance when applied as a coating matches that of a coated target substrate, such as that from an undamaged portion of an autobody. It is patentably distinct from dispensing of multiple paints from a dispenser in accordance with multiple paint formulas inputted in a computer. Thus, it is not seen why claim 7 is anticipated by Falcoff.

It is alleged in the Office action that as for claim 10, Falcoff discloses everything as recited in claim 1 and in addition Falcoff discloses a matched coating composition. The aforementioned remark and rejection are respectfully traversed since Falcoff in Figure 1 discloses a conventional way of making a paint from various tints, such as 10-12, which are dispensed in accordance with a formula inputted into computer 1. There is no disclosure in Falcoff of how to make a matched coating composition that produces a coating having appearance matches that of a coated target substrate, such as that from an undamaged portion of an auto body. Thus, it is not seen why claim 10 is anticipated by Falcoff.

9. The rejection of claims 20, 21 and 23 under 35 U.S.C. § 102(b) as being anticipated by US 5,668, 633 to Cheetham et al. (hereafter Cheetham, as corrected through a certificate of correction) and remarks associated therewith are respectfully traversed in view of the following remarks:

At the outset, it should be noted that Cheetham requires "a trial run" to determine whether the match is acceptable (col. 3, lines 40 – 64 of Cheetham and Figure 3). Cheetham, as seen in Figure 3, teaches taking color values from a customer supplied sample (36) by using spectrophotometer, searching a database of previously prepared color chips (40) to pull out a physical color chip (42) that comes close to the color values of the customer supplied sample and then such chip is visually inspected by an experienced color matcher to see if it is an acceptable match (44). If no match is found, a new matching paint is prepared by the experienced matcher, applied over a chip (48), which is then visually inspected to see if there is a closer match (52). If acceptable, its color data are entered (54); if not, the process is repeated (56, 58 and

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60), until an acceptable match is made. By contrast, no such trial-and-error steps requiring visual inspection are recited in claim 20 or claims depending therefrom.

Cheetham did not disclose or teach that regulatory practices developed for a specified end use are to be considered. The instant invention requires such a consideration in step (v) of claim 20. Cheetham did not disclose or teach that an acceptability equation for a specified end use is to be considered during the selection of an optimal viable combination from viable combinations. The instant invention requires such a consideration in step (vi) of claim 20. Thus, it is not seen why Cheetham anticipates the aforementioned claims.

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Claim rejections - 35 USC §103

12. The rejection of claims 8, 9, 15 and 18 under 35 U.S.C. § 103(a) as being unpatentable over Falcoff in view of Corrigan (US 6,522,977) and Kettler (US 5,929,998) and Steenhoek (US 4,917,495) and remarks associated therewith are respectfully traversed in view of the following remarks:

As discussed above, Falcoff disclose a conventional process that **repeatedly produces test paint samples**, measures the color values of the test paint samples produced and repeatedly corrects the formulation to achieve a close matched color, see Example 1, Col. 6, of Falcoff. Unlike what is taught in Falcoff, the instant claims **do not recite producing test paint samples**. Unlike, the current invention, Corrigan at column 2, lines 1-13 disclose a trial-and-error process that takes color readings by using a spectrophotometer of a coating of an area repaired by a user (column 5, line 9) to compare those color readings against those color readings supplied by a paint supplier and then storing the updated color information for future use. Steenhoek and Kettler disclose devices used for taking color readings of a colored surface. As pointed out in the Office Action, Corrigan and Kettler and Steenhoek all teach specific color measurement devices and method and do not teach on to produce matched color compositions. Moreover, as the color value of a wet paint flowing thorough cell 18 of Falcoff undergoes changes, reading of its color value through a viewing glass window of cell 18 is difficult to read, especially if metallic flakes are present. See Falcoff at column 3, lines 6-68 and column 4, lines 1-10. Thus, it is not seen why one of ordinary skill in the art would substitute the colorimeter attached to the device of Falcoff used for taking readings of wet paint with portable systems of Corrigan, Kettler and Steenhoek used for taking specular angle readings of colored surfaces, absent any teaching suggestion to do so in any of the combined references. Moreover, even when combined it would not lead to the invention of claims of 8, 9, 15 and 18. It is therefore submitted that Falcoff taken alone or in combination with Corrigan, Kettler and Steenhoek would not lead one of ordinary skill in the art to arrive at the presently claimed invention covered by claims 8, 9, 15 and 18 and the Patent Office has not met its burden of establishing *prima facie* obviousness of the aforementioned claims absent which the burden has not shifted to the applicants.

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13. The rejection of claims 16 and 17 under 35 U.S.C. § 103(a) as being unpatentable over Falcoff in view of Corrigan and remarks associated therewith are respectfully traversed in view of the discussion above.

14. The rejection of claim 19 under 35 U.S.C. § 103(a) as being unpatentable over Falcoff in view of Milosevic (US 4,853,542) and remarks associated therewith are respectfully traversed in view of the discussion above, i.e., it is not seen why one of ordinary skill in the art would substitute the colorimeter attached to the device of Falcoff used for taking readings of wet paint with a spectrophotometer of Milosevic having spherical configuration used for taking specular angle readings of colored surfaces absent any teaching to do so in either of these references.

15. The rejection of claims 22, 24 and 25 under 35 U.S.C. § 103(a) as being unpatentable over Cheetham and remarks associated therewith are respectfully traversed in view of the following remarks:

As discussed above, Cheetham, unlike current claim 20, requires "a trial run" to determine whether the match is acceptable, Col. 3, lines 44 – 64 of Cheetham. The instant invention does not require such "trial run". Since claims 22, 24 and 25 depend from claim 20, it is not seen why said claims would be obvious over Cheetham to those of ordinary skill in the art at the time of the invention. Moreover, color standard mentioned at column 2, lines 56-58 is a color standard, to be matched. It does not teach or suggest how processing of material made by the method of claims 22, 24 and 25 occurs. The Office Action stated that an official notice of the elements of the aforementioned claims is taken by the Examiner. Since the rejection is based on the alleged facts within the personal knowledge of the Examiner, applicants respectfully request, by an affidavit from the Examiner, how the teachings in Cheetham can be used to produce a matched resin used in making matched substrates.

For the record, applicants state that since all the remarks associated with all the rejections herein have been traversed, if there are any rejections based on any alleged facts within the personal knowledge of the Examiner, applicants respectfully request an affidavit from the Examiner for establishing such alleged facts within the personal knowledge of the Examiner.

A new multiple dependent claim 26 has been added for the Examiner's kind consideration. Support is found on page 44, lines 18-22 of the specification.

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Conclusion

Applicants respectfully submit that the claim amendments and the distinguishing observations concerning the references overcome the rejections maintained in the non-final Office Action. In view of the foregoing, allowance of the pending claims is respectfully requested.

Respectfully submitted,



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